

ABSTRACT OF THE DISCLOSURE

A crossbar switch system with redundancy has $N+1$ cross-bar switches. A first cross-bar switch has first outputs of each of a plurality of nodes applied to N input terminals thereof, an $(N+1)$ th cross-bar switch has N th outputs of each of the nodes applied to N input terminals thereof, and second to N th $(l$ th) cross-bar switches each have first to N th selection circuits, which are provided at respective input terminals thereof, to each of which are input mutually adjacent $(l-1)$ th and l th outputs among outputs of each of the nodes. Each $(J$ th) node has N selection switches, which are provided at input terminals thereof, to each of which are input J th outputs of two mutually adjacent cross-bar switches among the first to $(N+1)$ th cross-bar switches. In response to a selection control signal output from a failure processing circuit that executes crossbar switch failure processing, each of the selection circuits selects and outputs one of its two inputs.